treatment for various chronic pain conditions. The purpose of our study is to review the clinical and social benefits of a pain management programme in Hong Kong.
Methods: This was a prospective cohort study. 158 patients with chronic non-cancer pain and prolonged (mean, 46 months) psychosocial disability who joined the Comprehensive Outpatient Pain Engagement programme between 2002 and 2012 in Alice Ho Miu Ling Nethersole Hospital. A structured 6-week outpatient pain rehabilitation programme designed with cognitive behavioural approach to improve function and reduce disability, regardless of the cause or severity of pain. Social outcomes included return-to-work rate, hospital admissions, and outpatient visits. Physical outcomes included tolerance to sitting and standing. Psychological constructs such as mood, catastrophisation, self-efficacy, quality of life, and perceived performances were used. Each measure was taken before and 1 year after the programme.
Results: There was significant increase in return to work 1 year after commencement of the programme (35% after vs. 17% before the programme; odds ratio = 3.01), reduction in medical utilisation, and improvement in all physical and psychological measures. Pain intensity, psychological distress, and history of work-related injuries were not related to the likelihood of return to work. Shorter duration of pain and higher physical functioning score in 36-Item Short-Form Health Survey were prognostic indicators.
Conclusion: Patients with chronic pain who joined the Comprehensive Outpatient Pain Engagement programme showed significant functional improvement despite the long history of pain.

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Clinical transition for adolescents with developmental disabilities in Hong Kong: A pilot study

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Background and purpose: More children with developmental disabilities (DD) have reached their adulthood and transit from the paediatric to adult health services after 18 years of age. Information about clinical transition is limited and fragmented in Hong Kong. There is only one local study in this area on adolescents with chronic medical diseases but none on adolescents with DD. This study was designed to understand the needs and concerns of adolescents with DD and their care-givers when transiting from the paediatric to adult health services in Hong Kong.
Methods: A convenience sample of 22 parents and 13 adolescents recruited from two special schools was interviewed using a semi-structured questionnaire.
Results: Most of the study parents and adolescents were unwilling to transit from the paediatric to adult medical services. The main themes of the underlying reasons were unwilling to changes and discontentment towards the adult medical service. The participants also urged for a structured clinical transition service to support them during this challenging time.
Conclusion: This study was the first study in Hong Kong to understand the needs and concerns of adolescents with DD and their families during clinical transition. There is an urge for a structured clinical transition service in Hong Kong. The present findings have provided some insights for future studies in this area.

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Self-perceived competency of entry level physiotherapists in Hong Kong

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Background and purpose: Standards for entry-level physiotherapy knowledge, skills, and attributes have been well established and are assessed via self-administered competency checklists in many western countries. Such tools aim to promote students' self-awareness of knowledge gaps and provide insights on continuous learning. They may also help to improve curriculum design. To date, no such tool is available in any Asian countries. The purposes of this project were to: (1) formulate a self-perceived competency checklist for entry-level physiotherapists in Hong Kong; and (2) preliminarily assess the self-perceived competency level of physiotherapy graduates.
Methods: An expert panel consisted of four faculty staff from the Hong Kong Polytechnic University and six clinicians specialize in musculoskeletal, cardiopulmonary, neurological, and pediatric physiotherapy was formed. A checklist with 77 items was developed by the panel. For each item, respondents have to rate their perceived competency level as "quite competent", "competent", "very competent" or "I am not sure". The competency checklist was distributed to the graduates in May 2014 to assess their self-perceived competency level.
Results: Fifty-two out of 58 graduates completed the checklist. Most of them found this checklist useful for identifying their 'weak' areas. Overall, 92.7% of respondents perceived themselves as competent entry level physiotherapists. Nevertheless, five areas (out of 77 areas) were perceived as consistently weak across respondents. The result may indicate a need for curriculum improvement.
Conclusion: A competency checklist for entry level physiotherapist in Hong Kong is established. Generally, the graduates in Hong Kong perceived themselves as competent entry level physiotherapists.

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Development of the Hong Kong Chinese Örebro Musculoskeletal Pain Screening Questionnaire Short Form

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Background and purpose: The Örebro Musculoskeletal Pain Screening Questionnaire (ÖMPSQ) is a validated 21-item instrument to identify patients with musculoskeletal disorders at risk of developing chronicity and disability. This instrument is critiqued for practicality and a shortened-version is recommended to reduce the burden on patients, clinicians and researchers. A 10-item short form of ÖMPSQ (ÖMPSQ-10) was developed recently by the original authors. This study aimed to develop a Chinese version of the ÖMPSQ-10.
Methods: This study was part of a main study to develop a Chinese version of ÖMPSQ (CÖMPSQ-HK). The Chinese ÖMPSQ (CÖMPSQ-HK10) was constructed by taking reference to the ÖMPSQ-10. It was tested against the full version using receiver operating characteristic (ROC) curve analyses to ensure that measurement properties were comparable.
Results: A total of 305 back patients and 160 neck patients were recruited and followed-up for 1 year, with about 30% of patients lost to follow-up. Data for the shortened version were extracted from the full version completed by the participants. The internal consistency was satisfactory. There was excellent correlation between CÖMPSQ-HK10 and CÖMPSQ-HK. The areas under the curve of ROC curve analyses were similar for CÖMPSQ-HK10 and CÖMPSQ-HK in predicting return-to-work and long sick leave (longer than 60 days) at 6 months and 1 year for back patients and neck patients respectively.
Conclusion: The CÖMPSQ-HK10 demonstrated suitable internal consistency and good predictive validity in predicting return-to-work.

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Stability in children with cerebral palsy

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Background and purpose: The therapeutic use of horseback riding has been acknowledged and is used as part of physiotherapy treatment for children

with cerebral palsy. The need for the study arose as this is a cumbersome one and which requires larger open space too. A powered saddle made artificially excludes this problem and has number of advantages over using live animal.
Methods: This study was a quasi-experimental design. 20 children (8 diplegics, 7 hemiplegics and 5 ataxics) were allowed to participate in the pre-assessment session using the paediatric CTSIB tool. The child was allowed to stand in six different conditions for a maximum of 30 seconds. The subjects were allowed to sit and oscillate on the powered saddle for 30 minutes. Using a transparent sheet and video camera, the maximum postural sway was noted. Then the child was again tested on p-CTSIB for the same quiet upright stance.
Results: Related t test was done to find the improvement in balance irrespective of the CP type. In all the six conditions, the t value was significant at $p<0.001$ level. Paired t test was used to find the effectiveness of saddle riding with respect to each type of CP, and showed statistically non-significant t values, meaning the therapy is useful to all types of CP.
Conclusion: The subjects were found to have a significant improvement in postural stability even after a single trial. The balance may be improved through the rhythmical movement facilitating effective sensory feedback and feedforward.

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Cardiopulmonary training programme for adolescents with cerebral palsy: A pilot study

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Background and purpose: Adolescents with cerebral palsy are prone to develop muscles weakness and decrease in cardiopulmonary function, which have a great impact on their functional independence and daily life participation. The aims were to evaluate the effectiveness of exercise programme on cardiopulmonary and daily functions as well as promote the physical fitness concept to them.
Methods: Five adolescents (4 males and 1 female) with mean age 16.6 years categorized in Gross Motor Function Classification System level 1 or 2 were recruited in a 4-weeks standardized cardiopulmonary training programme in summer of 2014. Their target heart rate was set at 60—70% of maximum heart rate monitored by a Polar watch. A series of evaluation was done at Pre- and Post- Training, 3- and 6- months after training with four field tests: Muscle Power Sprint Test (MPST), 10-metre Shuttle Run Test (10m-SRT), Timed Up & Go Test (TUGT) and Step length.
Results: All participants showed improvement after training and subsequent follow-ups. The change in mean power of MPST, 10m-SRT, TUGT and step length with the baseline (56.22 watts, 6.3 level, 9.14 seconds and 58 cm) were +59% (89.44 watts), +46% (9.2 level), −35% (5.96 seconds) and +9% (63.46 cm) after training; +55% (87.2 watts), +22% (7.7 level), −23% (7.08 seconds) and +5% (61.15 cm) at 3 months follow-up, and +9% (61.1 watts), +8% (6.8 level), −6% (8.6 seconds) and +5% (61.15 cm) at 6 months follow-up.
Conclusion: The programme improves both the cardiopulmonary and daily functions of adolescents with cerebral palsy.

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Establishment of a normative database of drivers' job demands for a valid functional assessment of fitness for driving

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Background and purpose: A large proportion of outpatient physiotherapy patients have musculoskeletal illness and a proportion of patients are drivers of a variety of vehicles. However, there is a lack of normative data of the drivers' job demands in manipulating the steering wheel, brake or pedals for various types of vehicles. The objective of this study was to establish a normative data set for a more valid functional assessment of fitness for driving.
Methods: Seven types of vehicles was identified for field study including private passenger car, light goods vehicle, private light bus, medium goods vehicles (8 tons and 16 tons), heavy goods vehicle (24 tons), public bus (double deck bus and single deck bus) and motorcycle. This is based on the system used by the Transport Department in Hong Kong. Various field tests on the measurement of different tasks were performed & measured for the above mentioned seven types of vehicles.
Results: The static forces of the following tasks for driving were measured: (i) turning the steering wheel; (ii) pulling the hand brake; (iii) pressing on foot brake pedal; (iv) pressing on foot clutch pedal for car of manual transmission; and (v) changing gears. The following tasks for driving motorcycle were measured: (i) steering the handle bar; (ii) holding hand brake for the front wheel; (iii) holding hand clutch; (iv) turning throttle; (v) pressing on foot brake pedal; and (vi) changing gears with foot lever.
Conclusion: Various manipulating tasks were used to formulate as the standardized assessment criteria and it served as important reference data for a valid functional capacity evaluation and more appropriate return-to-work recommendation.

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Feasibility, effectiveness and cost estimation of a 3-week, physiotherapy-led exercise programme for prostate cancer survivors

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Background and purpose: Prostate cancer has become the second most common cause of cancer worldwide. However, rehabilitation regimes are not commonly offered to cancer survivors generally in Hong Kong, and there is no exercise programme designed for prostate cancer survivors in particular. The purposes of this study were to examine the feasibility, effectiveness and cost implications of a 3-week, physiotherapy-led exercise programme for prostate cancer survivors.
Methods: A 3-week exercise programme (1 hour/session, 1 session/week) including aerobic, resistance and flexibility exercises was implemented under the supervision of physiotherapist. This exercise programme was specifically designed by physiotherapist for prostate cancer survivors. Exercise sheet and video were provided to ensure better home exercise compliance.
Results: Twenty-two prostate cancer patients were recruited in this pilot programme and no adverse events were reported. Eight patients (mean age: 72.8 ± 7.3) completed the physical and psychological assessment. Significant improvement was found in patients' heart rate ($p\leq0.05$) after 3 weeks of training. Improving trends were shown in blood pressure, lower limbs strength and health domain of subjective wellbeing although results were not significant. Ten patients completed the satisfaction questionnaire and all satisfied with the exercise programme and found it was effective to enhance their interest in exercise.
Conclusion: Results from this pilot programme were encouraging. This specifically designed exercise programme was shown to be feasible with promising effects on prostate cancer survivors. However, further study with larger sample size is necessary to ascertain these results. In the cost estimation, the modest costs associated with this programme may support its routine application, although more precise calculation may be required.

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Melatonin affects postural control under dual-tasking condition in community-dwelling older adults

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Background and purpose: Endogenous melatonin release declines with age. However melatonin is an easily accessible dietary supplement for older adults with sleeping difficulties. Dual-tasking is a common daily activity but requires extra attentional resources especially in older adults. Falling downstairs is a leading cause of accidental death. Since limited research has investigated the effect of melatonin on postural control after stepping down while performing a concurrent auditory response task, this study was therefore to investigate the postural control after stepping down while performing dual-tasking with or without administration of melatonin.
Methods: Randomized, double-blind, placebo-controlled and cross-over design study was conducted in 34 older adults. They were randomly assigned to conduct: (1) auditory Stroop test; (2) stepping down task; and (3) stepping down with concurrent auditory response task before and 1 hour after taking